

## INFORMATION TECHNOLOGY Sample North Dakota Career Cluster Plan of Study <a href="https://www.nd.gov/cte">www.nd.gov/cte</a> • <a href="https://www.careerclusters.org">www.careerclusters.org</a></a>

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SAMPLE OCCUPATIONS RELATING TO THIS CAREER CLUSTER					
Pathway	Occupations				
NETWORK SYSTEMS	Network Administrator   Network Engineer   Network Technician   Network Security Analyst   Telecommunications Network Technician				
INFORMATION SUPPORT & SERVICES	Data Administrator ◆ Data Modeler ◆ Help Desk Specialist ◆ Computer Support Specialist ◆ Computer Systems Analyst				
INTERACTIVE MEDIA	Multimedia Specialist    • Web Designer   • Web Site Developer   • Animator				
PROGRAMMING & SOFTWARE DEVELOPMENT	Computer Programmer ◆ Software Applications Specialist ◆ Computer Software Engineer ◆ Software Applications Tester				

			SUGGESTED COUR	SE OF HIGH SCHOOL S	TUDY			
It is suggested that students consider appropriate dual credit, articulation, or advanced placement opportunities for postsecondary credit.								
English (four units required to graduate)	Math (two units required to graduate)	Science (two units required to graduate)	Social Studies (three units required to graduate)	Physical Education (one unit required to graduate)	North Dakota Career Education and Other Elective Classes (one unit required to graduate)	Additional Suggested Learning Opportunities		
English I	Algebra	Physical	World History	Physical	Introduction to Information	School-Based:		
English II	Geometry	Science	U.S. History	Education or	Technology	☐ SkillsUSA		
English III	Algebra II	■ Biology or	Government	☐ Health	Programming Essentials	☐ FBLA		
English IV		Chemistry		Physical	CIW Foundations	□ TSA		
■ Speech				Education	☐ CIW Site Design	Career Research		
					☐ Computer Hardware & Operating	Cooperative Education		
					System	■ Internship		
					■ Network Operating Systems	Job Shadowing		
					☐ Cisco Semester 1	Service Learning Project		
					☐ Cisco Semester 2	Community-Based:		
					☐ Cisco Semester 3	Mentorship		
					☐ Cisco Semester 4	■ Volunteer		
					☐ Windows XP Pro	Part-time Employment		
					☐ Windows 2003 Server			
					☐ Geographic Information Systems			
					☐ Data Modeling and SQL			

SAMPLE NORTH DAKOTA POSTSECONDARY PROGRAMS RELATED TO THIS CAREER CLUSTER							
Pathway	Associate Degree or Less	Bachelors Degree	Masters Degree or More				
NETWORK SYSTEMS	■ Network Systems Support						
INFORMATION SUPPORT & SERVICES	Computer Support Specialist	Computer Technology Management					
	<ul><li>Operating Systems Technician</li></ul>						
INTERACTIVE MEDIA	■ Webmaster/Web Designer	☐ Graphic Design Technology					
PROGRAMMING & SOFTWARE DEVELOPMENT		☐ Computer Science Programming	☐ Software Engineer				
PROGRAMMINING & SOFTWARE DEVELOPMENT			Computer Science Programming				